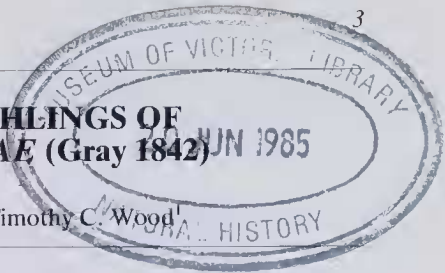


**A NEST AND HATCHLINGS OF
EMYDURA VICTORIAE (Gray 1842)**

Anthony M.A. Smith^{1,2} and Timothy C. Wood¹



At 7am on 21 October 1984, three hatchling *E. victoriae* (Gray 1842) were observed among leaf litter on the bank of a billabong associated with the McKinlay River, N.T., approximately 7km south of the Mary-McKinlay river junction. A nest containing a further seven animals in the process of hatching was discovered beneath the litter among the roots of a *Pandanus* clump.

The nest was approximately 3m from the water's edge and 1.5m above water level. At the time of laying, earlier in the dry season, the water level would have been closer to the nest site. The nest was a simple hole, roughly spherical (8cm diameter) in shape, with the base 12cm below the surface. The substrate was blacksoil rich in humus. There was no obvious neck to the nest chamber, but such a structure may have existed at the time of laying.

The eggs were hard-shelled and elliptical, as are those of other *Emydura* species (Cann 1978). Within the nest, one egg contained a dead but fully developed embryo, with its yolk still external to the abdominal cavity. Another egg was found crushed and empty. An additional four or five egg shells were in or near the nest and presumably the hatchlings from those were already in the water. Clutch size was 16 or 17. The exact number of eggs could not be determined as the shells had fragmented during hatching.

The average dimensions of the hatchlings appear in Table 1. They are larger than those reported for Fraser Island *E. krefftii* (McNichol and Georges 1980, Georges 1982) and Murray River *E. macquarii* (Thompson 1983).

The ten hatchlings were sexed on the basis of gonad morphology and six proved to be female and four male. This result is not significantly different to the 1:1 sex ratio expected under genotypic sex determination.

The specimens described here have been submitted to the Australian Museum, Sydney (Field numbers 30913-30923).

Acknowledgements

We thank Grahame Webb and David Choquenot for checking our sexing of the hatchlings and for comments on the manuscript.

References

CANN, J. (1978). Tortoises of Australia. (Angus and Robertson: Sydney) 142pp.
COGGER, H.G. (1979). Reptiles and Amphibians of Australia. (A.H. and A.W. Reed: Sydney) 608pp.
GEORGES, A. (1982) Ecological studies of Krefft's river tortoise, *Emydura krefftii* (Gray), from Fraser Island, Queensland (Unpublished PhD thesis: University of Queensland)
McNICHOL, K. and GEORGES, A. (1980) Observations on the eggs and hatchlings of *Emydura krefftii* from Frazer Island. Herpetofauna 12(1):10-12

THOMPSON, M.B. (1983) The physiology and ecology of the eggs of the Pleurodiran tortoise *Emydura macquarii* (Gray), 1831. (Unpublished PhD thesis: University of Adelaide)

Table 1: MEAN DIMENSIONS OF TEN *E. VICTORIAE* HATCHLINGS

	Mean	Standard Error	Range
Total weight (g)	5.73	0.14	4.89-6.20
Yolk weight (g)	0.34	0.07	0.14-0.93
Carapace height (cm)	1.59	0.02	1.46-1.66
Carapace length (cm)	3.16	0.05	2.81-3.31
Carapace width (cm)	2.87	0.06	2.50-3.11
Head width (cm)	0.99	0.01	0.93-1.02

¹ Conservation Commission of the Northern Territory, P.O. Box 38496, Winnellie, N.T. 5789.

² Research School of Biological Sciences, The Australian National University, G.P.O. Box 475, Canberra, A.C.T. 2601.